

Docket No. AUS920030466US1

**CLAIMS:**

What is claimed is:

1. A method for performing bus arbitration, the method comprising:

receiving a request to perform a device access operation on an end device on a bus;  
determining whether the end device is locked; and  
responsive to the end device not being locked, locking the end device and performing the device access operation.

2. The method of claim 1, wherein the device access operation is one of a read operation and a write operation.

3. The method of claim 1, further comprising:  
responsive to the end device being locked, denying the device access operation.

4. The method of claim 1, wherein the step of determining whether the end device is locked includes determining whether an address of the end device is found in a list of occupied end devices.

5. The method of claim 1, wherein the step of locking the end device includes placing a device address of the end device in a list of occupied end devices.

Docket No. AUS920030466US1

6. The method of claim 5, further comprising:  
responsive to the device access operation  
completing, unlocking the end device.

7. The method of claim 6, wherein the step of unlocking  
the end device includes removing the device address from  
the list of occupied end devices.

8. An apparatus for performing bus arbitration, the  
apparatus comprising:  
means for receiving a request to perform a device  
access operation on an end device on a bus;  
means for determining whether the end device is  
locked; and  
means, responsive to the end device not being  
locked, for locking the end device and performing the  
device access operation.

9. The apparatus of claim 8, wherein the device access  
operation is one of a read operation and a write  
operation.

10. The apparatus of claim 8, further comprising:  
means, responsive to the end device being locked,  
for denying the device access operation.

11. The apparatus of claim 8, wherein the means for  
determining whether the end device is locked includes  
means for determining whether an address of the end  
device is found in a list of occupied end devices.

Docket No. AUS920030466US1

12. The apparatus of claim 8, wherein the means for locking the end device includes means for placing a device address of the end device in a list of occupied end devices.

13. The apparatus of claim 12, further comprising:  
means, responsive to the device access operation completing, for unlocking the end device.

14. The apparatus of claim 13, wherein the means for unlocking the end device includes means for removing the device address from the list of occupied end devices.

15. An apparatus for performing bus arbitration, the apparatus comprising:  
a bus;  
at least one end device connected to the bus;  
an application; and  
a driver layer, wherein the driver layer includes at least one device driver that communicates with the at least one end device and a wrapper layer,  
wherein the wrapper layer receives a request to perform a device access operation on an end device from within the at least one end device on the bus, determines whether the end device is locked, and, responsive to the end device not being locked, locks the end device and performs the device access operation.

Docket No. AUS920030466US1

16. A computer program product, in a computer readable medium, for performing bus arbitration, the computer program product comprising:

instructions for receiving a request to perform a device access operation on an end device on a bus;

instructions for determining whether the end device is locked; and

instructions, responsive to the end device not being locked, for locking the end device and performing the device access operation.

17. The computer program product of claim 16, wherein the instructions for determining whether the end device is locked include instructions for determining whether an address of the end device is found in a list of occupied end devices.

18. The computer program product of claim 16, wherein the instructions for locking the end device include instructions for placing a device address of the end device in a list of occupied end devices.

19. The computer program product of claim 18, further comprising:

instructions, responsive to the device access operation completing, for unlocking the end device.

20. The computer program product of claim 19, wherein the instructions for unlocking the end device include

Docket No. AUS920030466US1

instructions for removing the device address from the  
list of occupied end devices.